REMARKS

Claim Rejections

Claim 1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wang (U.S. 5,940,750) in view of Kuo (U.S. 6,510,314).

Drawings

Applicant proposes to amend Figure 1, as illustrated in red on the attached photocopy. In Figure 1, it is proposed to add the label --PRIOR ART--. No "new matter" has been added to the original disclosure by the proposed amendment to this figure. Approval of the proposed drawing change is respectfully requested.

New Claim

By this Amendment, Applicant has canceled claim 1 and has added new claim 2 to this application. It is believed that the new claim specifically set forth each element of Applicant's invention in full compliance with 35 U.S.C. § 112, and define subject matter that is patentably distinguishable over the cited prior art, taken individually or in combination.

The new claims is directed toward a method of using a bipolar junction transistor as a self-oscillating down converter of a satellite down converter, which comprises the steps of: providing a circuit having at least one receiver (10) and an output port; inserting the bipolar junction transistor (15), a low-noise amplifier (11), and an intermediate frequency amplifier (12) between the at least one receiver and the output port; positioning the bipolar junction transistor between the low-noise amplifier and the intermediate frequency amplifier; and utilizing the bipolar junction transistor as a local oscillator and a mixer.

The primary reference to Wang discloses a low-cost low noise block down-converter with a self-oscillating mixer for satellite broadcast receivers including low noise amplifiers (32, 34), a mixer (36) having a high-Q dielectric resonator (37), and an IF amplifier (38).

On page 3 of the outstanding Office Action, the Examiner admits that "Wang does not disclose using a bipolar junction transistor as a self-oscillating down

converter, such that the bipolar junction transistor serves as a local oscillator and a mixer." Wang does not teach positioning the bipolar junction transistor between the low-noise amplifier and the intermediate frequency amplifier.

The secondary reference to Kuo discloses a mixer circuit with output stage for implementation on integrated circuit including three pairs of NPN bipolar junction transistors (12a, 12b, 16a-16d), a pair of matched resistors (11a, 11b), and an amplifier (60).

Kuo does not teach providing a circuit having at least one receiver and an output port; inserting the bipolar junction transistor, a low-noise amplifier, and an intermediate frequency amplifier between the at least one receiver and the output port; positioning the bipolar junction transistor between the low-noise amplifier and the intermediate frequency amplifier; and utilizing the bipolar junction transistor as a local oscillator and a mixer.

Even if the teachings of Wang and Kuo were combined, as suggested by the Examiner, the resultant combination does not suggest positioning the bipolar junction transistor between the low-noise amplifier and the intermediate frequency amplifier; nor does the combination suggest utilizing the bipolar junction transistor as a local oscillator and a mixer.

It is a basic principle of U.S. patent law that it is improper to arbitrarily pick and choose prior art patents and combine selected portions of the selected patents on the basis of Applicant's disclosure to create a hypothetical combination which allegedly renders a claim obvious, unless there is some direction in the selected prior art patents to combine the selected teachings in a manner so as to negate the patentability of the claimed subject matter. This principle was enunciated over 40 years ago by the Court of Customs and Patent Appeals in In re Rothermel and Waddell, 125 USPQ 328 (CCPA 1960) wherein the court stated, at page 331:

> The examiner and the board in rejecting the appealed claims did so by what appears to us to be a piecemeal reconstruction of the prior art patents in the light of appellants' disclosure. ... It is easy now to attribute to this prior art the knowledge which was first made available by appellants and then to assume that it would have been obvious to one having the ordinary

> skill in the art to make these suggested reconstructions. While such a reconstruction of the art may be an alluring way to rationalize a rejection of the claims, it is not the type of rejection which the statute authorizes.

The same conclusion was later reached by the Court of Appeals for the Federal Circuit in Orthopedic Equipment Company Inc. v. United States, 217 USPQ 193 (Fed.Cir. 1983). In that decision, the court stated, at page 199:

> As has been previously explained, the available art shows each of the elements of the claims in suit. Armed with this information, would it then be non-obvious to this person of ordinary skill in the art to coordinate these elements in the same manner as the claims in suit? The difficulty which attaches to all honest attempts to answer this question can be attributed to the strong temptation to rely on hindsight while undertaking this evaluation. It is wrong to use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit. Monday morning quarterbacking is quite improper when resolving the question of non-obviousness in a court of law.

In In re Geiger, 2 USPQ2d, 1276 (Fed.Cir. 1987) the court stated, at page 1278:

> We agree with appellant that the PTO has failed to establish a *prima facie* case of obviousness. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination.

Applicant submits that there is not the slightest suggestion in either Wang or Kuo that their respectively teachings may be combined as suggested by the Examiner. Case law is clear that, absent any such teaching or suggestion in the prior art, such a combination cannot be made under 35 U.S.C. § 103.

Neither Wang nor Kuo disclose, or suggest a modification of their specifically disclosed structures that would lead one having ordinary skill in the art to arrive at Applicant's claimed structure. Applicant hereby respectfully submits that no combination of the cited prior art renders obvious Applicant's new claim.

Summary

In view of the foregoing amendments and remarks, Applicant submits that this application is now in condition for allowance and such action is respectfully requested. Should any points remain in issue, which the Examiner feels could best be resolved by either a personal or a telephone interview, it is urged that Applicant's local attorney be contacted at the exchange listed below.

Respectfully submitted,

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ANNOTATED MARKED-UP DRAWING

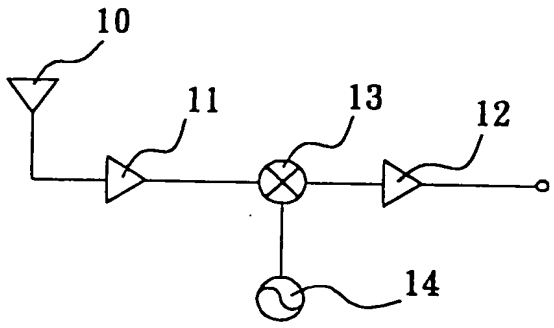

FIG.1
PRIOR ART

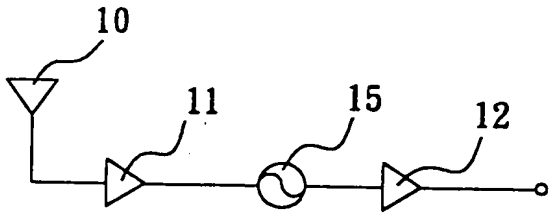

FIG.2